DOCUMENT RESUME

ED 247 225 SP 024 939

AUTHOR Horton, Daniel, Jr.; Summers, Jerry
TITLE A Decade of Change in Teacher Education: Results of a Ten-Year Study on Quality and Personal Characteristics of Teacher Candidates.
PUB DATE May 84
NOTE 18p.
PUB TYPE Statistical Data (110)

EDRS PRICE MF01/PC01 Plus Postage.
DESCRIPTORS Age Differences; Career Choice; Commuting Students; Enrollment Rate; Grade Point Average; Higher Education; Longitudinal Studies; Preservice Teacher Education; Residential Patterns; *Schools of Education; Scores; Secondary School Teachers; *Student Characteristics; *Student Teachers; Teacher Characteristics; Teacher Effectiveness; Transfer Students
IDENTIFIERS *Indiana State University; Scholastic Aptitude Test

ABSTRACT

Data are presented on characteristics of secondary school teacher education candidates at Indiana State University (ISU). Most of the 11 charts present comparisons of students' grade point averages (GPA) in relation to another variable, such as major, Scholastic Aptitude Test (SAT) score, etc. There is a 10-year difference between the student populations compared, usually with the first group representing students who were at ISU between 1971-73, and the second group representing students who were at ISU between 1981-83. Comparative data and GPA data are presented on such variables as: (1) total enrollment in the secondary school student teaching experience; (2) majors of the secondary school teacher education candidates; (3) average SAT scores of selected university groups (teacher candidates and non-teacher candidates); (4) average age of student teachers at the time of application for student teaching; (5) student teachers who commute and those who do not commute; (6) major characteristic of a good teacher as identified by student teachers; (7) major characteristic of an incompetent teacher as identified by student teachers; (8) student teacher population, grouped according to the amount of academic credit transferred to Indiana State University; (9) student teachers categorized according to number of hours worked per week; (10) number of student teachers who indicated certain selected factors contributing to their choice of teaching as a profession; and (11) profile of the typical Indiana State University student teacher. (JD)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

ED247225

TITLE: A DECADE OF CHANGE IN TEACHER EDUCATION: RESULTS OF A TEN-YEAR STUDY ON QUALITY AND PERSONAL CHARACTERISTICS OF TEACHER CANDIDATES

Dr. Daniel Horton, Jr.

Dr. Jerry Summers

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY

Daniel Horton, Jr.
Jerry Summers

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

U.S. DEPARTMENT OF EDUCATION
NATIONAL INSTITUTE OF EDUCATION
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

☒ This document has been reproduced as received from the person or organization originating it.

☐ Minor changes have been made to improve reproduction quality.

• Points of view or opinions stated in this document do not necessarily represent official NIE position or policy.

Department of Secondary Education

Indiana State University

Terre Haute, Indiana 47809

SP024939

TOTAL ENROLLMENT IN THE SECONDARY STUDENT TEACHING

EXPERIENCE DURING TWO SELECTED YEARS

	Total Enrollment
1972 - 1973	920
1982 - 1983	305

*The enrollment in 1982-1983 represents a 66.8 % drop from the year 1972-1973.

**According to an NEA report by William S. Graybeal, "Teacher Supply and Demand in the Public Schools" the number of students in teacher education has declined by 50% nationally during the period 1972 to 1981.

- What does the decline in pupil population say about the ISU program in secondary teacher education?

THE AVERAGE GPA OF STUDENT TEACHERS
CATEGORIZED BY MAJOR FOR 1971-73 AND 1981-83

Subject	1971 - 73			1981 - 1983		
	GPA	N	% Of Gr.	GPA	N	% Of Gr.
Art	2.69	32	2.8	3.10	1	.5
Business	2.57	46	4.0	2.66	5	2.6
Dist. Ed.	2.51	7	.6	2.86	2	1.0
English	3.00	100	8.8	3.49	10	5.2
Foreign Language	3.12	34	3.0			
Home Economics	2.68	51	4.5	2.98	13	6.7
Vocational Trade Technical	2.70	25	2.2	2.89	2	1.0
Industrial Arts	2.49	141	12.3	2.99	20	10.4
Math	3.06	62	5.4	3.16	14	7.3
Music	2.87	57	5.0	3.00	12	6.2
MPE	2.35	111	9.7	2.56	21	10.9
WPE	2.52	108	9.5	2.95	25	13.0
Health and Safety	2.51	10	.9	3.60	2	1.0
Life Science	2.87	11	1.0	3.03	2	1.0
Chemistry				3.80	1	.5
Earth Science	2.25	15	1.3			
General Science	2.84	14	1.2	2.22	1	.5
Physics	2.55	2	.2			
Special Education	2.64	114	10.0	3.16	31	16.1
Speech and Hearing Therapy	2.70	59	5.2	3.51	9	4.7
Speech	2.58	28	2.5	2.87	4	2.1
Social Science	2.77	110	9.6	2.73	14	7.3
Psychology	3.13	1	.1			
Journalism	2.34	1	.1	2.40	2	1.0
Audio Visual	3.00	2	.2	3.00	2	1.0
Drivers Education	2.46	1	.1			

Note - Gr. in above chart stands for Group (1971-73 group and 1981-83 group)
*Av. GPA for 1971-73=2.67 and Av. GPA for 1981-83=2.99
**Significant increases in GPA from 1971-73 to 1981-83 were shown in English, Industrial Arts, MPE, WPE, Special Education, and Speech and Hearing Therapy
***Subject areas where the GPA differed significantly from the mean for all student student teachers in the 1981-83 group were:
MPE - lower
English, Speech & Hearing Therapy - higher

A COMPARISON OF THE AVERAGE GPA AND SAT SCORES OF SELECTED UNIVERSITY GROUPS FOR THE YEARS 1971-73 AND 1981-83

Years	Average GPA			Av SAT Freshmen
	Student Teachers	Juniors	ISU	
1971 - 1973	2.68	2.67	2.59	432
1981 - 1983	3.00	2.69	2.58	395

Note: The data for both Junior and ISU average GPA is computed on first semester averages for the years 1971-73. Both semesters are used for computing the 1981-83 averages.

*Student teachers have a significantly higher average GPA in 1981-83 than they did in 1971-73. The difference is significant at the .01 level.
**Secondary Education student teachers had basically the same average GPA as their university counterparts (juniors) in 1971-73. In 1981-83 the average GPA of student teachers was significantly higher than the average GPA of their junior counterparts in the total university (at the .01 level of significance).
***The average GPA for the total student body as well as the average GPA for ISU Juniors did not change (sig.) during the ten year period of 1971-73 to 1981-83.
****The average SAT scores for ISU entering freshmen are figured by averaging the total verbal and math scores for the years 1971 plus 1972 and the years 1981 plus 1982.

- The SAT scores for entering freshmen at ISU dropped by 8.6% during the time period 1971-73 to 1981-83.
- While the SAT scores dropped during the ten year period by 8.6% for entering freshmen at ISU, the average GPA for ISU remained basically the same. During the same 10 year period the average GPA for secondary education student teachers increased by 11.9% (from 2.68 to 3.00).
- It is our conclusion that:

A. ISU student teachers have higher academic averages than the total ISU student body in 1981-83.

B. ISU student teachers in 1981-83 are at least equal to (and probably better than) the relative quality of ISU student teachers in 1971-73, when compared to the total population of all higher education students in the United States (academically).

AGE OF STUDENT TEACHERS AT THE TIME OF
APPLICATION FOR STUDENT TEACHING

Age	1971-72 + 1972-73 Group		1981-82 + 1982-83 Group	
	Av. GPA	Number	Av. GPA	Number
18	2.32	4		
19	2.98	81	3.32	3
20	2.75	586	3.12	48
21	2.52	283	2.98	77
22	2.43	99	2.80	25
23	2.40	40	2.76	10
24	2.49	40	2.49	3
25	2.68	26	2.45	4
26	2.52	12	3.23	3
27	2.74	6	3.87	1
28	2.73	10		
29	2.81	10	3.07	3
30	2.92	7	2.97	2
31	2.90	4	3.20	2
32	2.32	4	3.08	1
33	2.98	6		
34	2.80	3	3.42	5
35	2.69	2	4.00	1
36	2.63	3		
37	3.47	5	3.70	2
38			3.17	2
39	2.91	3		
40			2.36	1
42	3.51	3		
43	3.46	1	2.86	1
44	2.53	2		
46	2.61	1		
48	3.60	1		
50	3.20	1		
54	3.63	1		
56			2.83	1
57	2.98	1		

*The N for the 1971-73 group is 1,242. For the 1981-83 group, N=194.
**The average age of the 1971-73 group is 21.5 years. The average age of the 1981-83 group is 22.7 years. The difference in the average ages is significant at the .001 level.
***The percent of student teachers age 30 and over has increased from 3.9% in the 1971-73 group to 9.3% in the 1981-83 group.

BEST COPY AVAILABLE

Analysis of the chart dealing with the age of student teachers at the time of their application for student teaching.

A. The number of student teachers age 20 was by far the largest group in the 1971-1973 group. The number os student teachers age 21 was by far the largest group in the 1981-83 group of student teachers.

B. It appears student teachers at the time of their application to student teach were significantly older in the 1981-83 than they were in 1971-73. This is due to differences in the age of the typical university age student as well as an increase in the percentage of students over 30.

A COMPARISON OF STUDENT TEACHERS WHO COMMUTE
WITH THOSE WHO DO NOT COMMUTE

	1971 - 73			1981 - 83		
	Number	%	GPA	Number	%	GPA
Students Who Commute	572	47.4	2.70	76	39.2	3.01
Students Who Do Not Commute	634	52.6	2.65	118	60.8	2.99

A. The percentage of student teachers who commute has decreased since 1971-73.

- This likely means a larger percentage of student teachers are coming from outside the Terre Haute area.
- Are we designing our teacher education program in such a fashion as to meet the needs of an increasing majority of students who come from outside the Terre Haute area?

B. The GPA of students who commute remains basically the same as the GPA of those who do not commute. The student who goes into teaching from the Terre Haute area is basically equivalent (in terms of GPA) to the student who comes to Terre Haute from another geographic location to prepare to teach.

BEST COPY AVAILABLE

THE MAJOR CHARACTERISTIC OF A GOOD TEACHER AS IDENTIFIED BY STUDENT TEACHERS

Characteristic	% of 71-72 + 72-73 Group	Av. GPA of 71-72 + 72-73 Group	% of 81-82 + 82-83 Group	Av. GPA of 81-82 + 82-83 Group
Concern for the individual	21.7	2.69	33	2.97
Emotional stability	.5	3.05	3.1	3.03
Enthusiasm	11.4	2.67	7.7	3.14
Intelligence				
Integrity	3.5	2.52	4.1	3.26
General knowledge			.5	2.98
Mastery of subject-matter of teaching field	9.5	2.81	8.2	3.01
Understanding of Education	23.8	2.72	.5	2.51
Personal effectiveness	20.6	2.56	26.3	2.87
Skill in communication			11.9	3.19

*The raw chi square for the above data (using cells for % of 71-72 + 72-73 group and % of 81-82 + 82-83 group) is significant at the .00 level.

** The mean GPA of the total population involved in all above groups is 2.72.

***The mean GPA of the 71-72 + 72-73 group is 2.67. The mean GPA of the 81-82 + 82-83 group is 2.99.

****When comparing the GPA of those student teachers who chose personal characteristics against the GPA of those student teachers who chose intellectual factors (intelligence, general knowledge, mastery of subject-matter teaching field), there was no significant difference.

BEST COPY AVAILABLE

BEST COPY AVAILABLE

THE MAJOR CHARACTERISTIC OF AN INCOMPETENT TEACHER AS IDENTIFIED BY STUDENT TEACHERS

Characteristic	% of 71-72 + 72-73 Group	Av. GPA of 71-72 + 72-73 Group	% of 81-82 + 82-83 Group	Av. GPA of 81-82 + 82-83 Group
Concern for the individual	11.1	2.65	16	2.90
Emotional Stability	3.7	2.67	1	2.91
Enthusiasm	15.3	2.68	4.6	2.92
Intelligence				
Integrity	3.5	2.76	.5	2.57
General knowledge	.2	2.47	.5	3.13
Mastery of subject-matter of teaching field	9.8	2.79	8.2	3.08
Understanding of Education	29.6	2.70	1.0	3.18
Personal effectiveness	8.9	2.63	42.8	3.01
Skill in communication	.1	2.02	10.8	3.17

*The raw chi square for the above data (using cells for % of 71-72 + 72-73 group and % of 81-82 + 82-83 group) is significant at the .00 level.

**The mean GPA of the total population involved in all above groups is 2.72 .

***The mean GPA of the 71-72 + 72-73 group is 2.67 . The mean GPA of the 81-82 + 82-83 group is 2.99.

****When comparing the GPA of those student teachers who chose personal characteristics against the GPA of those student teachers who chose intellectual factors (intelligence, general knowledge, mastery of subject-matter teaching field), there was no significant difference.

Analysis of charts dealing with major characteristics of good and incompetent teachers.

A. Student teachers consider personal characteristics more important than intellectual factors when evaluating teachers as either good or incompetent. Characteristics most often cited include understanding of education, enthusiasm, personal effectiveness, and concern for the individual.

B. Student teachers tend to choose the same type of characteristics as being important, regardless of their own personal GPA.

C. Student teachers have not basically changed in the 10 year period of 1971-73 through 1981-83 in that both groups basically identify personal characteristics as most important.

Definitions for characteristics used.

Concern for the individual - respect for personality or empathy

Emotional stability - even temperament, sense of humor, patience, self-control, personal security

Enthusiasm - for teaching, for working with the class, energy, drive

Intelligence - insight, adaptability, open-mindedness

Integrity - consistent philosophy, honesty, fairness

General knowledge - breadth and depth

Mastery of subject-matter of teaching field - understanding of subject and understanding of structure and logic of the discipline

Understanding of Education - how pupils learn, how one person influences another, assessing difficulties of learners

Personal effectiveness - charm, skill in human relationships

Skill in communication - clarity of expression, identification of main and subordinate points, logical relationships

BEST COPY AVAILABLE

THE STUDENT TEACHER POPULATION FOR 1971-1973 AND 1981-1983 GROUPED ACCORDING TO THE AMOUNT OF ACADEMIC CREDIT TRANSFERRED TO ISU

Amount of Credit Transferred (Semester Hours)	1971 - 73		1981 - 83	
	N	Av GPA	N	Av GPA
0 - 16	979	2.66	134	2.92
17 - 32	70	2.75	15	3.14
33 - 48	31	2.76	7	3.05
49 - 54	16	2.77	6	2.99
55 - 60	12	2.74	5	2.92
61 -76	34	2.88	13	3.33
77 - 92	8	2.72	4	3.39
93 - 108	3	2.83	4	2.92

*The Av GPA for the total of those students included in the seven groups who transferred from 17 to 108 semester hours of credit to ISU is significantly higher than for the single group who transferred from 0 to 16 hours of credit to ISU. This is true for both the time periods of 1971-73 and 1981-83. It is significantly higher in both cases at the .01 level of significance.

- It is concluded that students who transfer to ISU with 17 or more semester hours of transfer credit make better grades at ISU than those students already at ISU (who go into teaching).

BEST COPY AVAILABLE

STUDENT TEACHERS CATEGORIZED ACCORDING TO NUMBER OF HOURS WORKED PER WEEK - SHOWING THE NUMBER IN EACH GROUP AND AVERAGE GPA FOR EACH GROUP DURING THE YEARS 1971-72 + 1972-73 AND 1981-82 + 1982-83

Number of Hours Worked Per Week	1971-72 + 1972-73			1981-82 + 1982-83		
	Av. GPA	Number	%	Av. GPA	Number	%
0	2.69	645	55.8	2.97	161	83.4
1 - 5	2.68	346	30.0	3.14	10	5.2
6 - 10	2.64	76	6.6	3.40	8	4.1
11 - 15	2.61	36	3.1	3.04	5	2.6
16 - 20	2.53	48	4.2	2.71	7	3.6
over 20	3.10	3	.3	3.90	2	1.0

*When comparing the GPA of the total student teachers in the five categories of hours worked (1 through over 20) with the GPA of the student teachers in the category for those who did not work, there was no significant difference. This was true in both the 1971-73 group and the 1981-83 group. Combining this information with a visual examination of the above data, it is concluded that grade point average is not affected by the fact that a student works.

CHART SHOWING THE NUMBER OF STUDENT TEACHERS WHO INDICATED CERTAIN SELECTED FACTORS CONTRIBUTED TO THEIR CHOICE OF TEACHING AS A PROFESSION DURING THE YEARS 1971-73 AND 1981-83

Year	Factors Which Contributed To The Choice Of Teaching As A Profession														
	Former Teacher			Concern For People			Job Security			Don't Know			Parents		
	%	N	Av GPA	%	N	Av GPA	%	N	Av GPA	%	N	Av GPA	%	N	Av GPA
1971 - 73	15	164	2.69	21	227	2.71	7	79	2.70	49	538	2.65	8	89	2.70
1981 - 83	6	12	2.92	48	93	3.00	2	4	3.33	36	69	3.01	7	14	2.89

*The statistics which seem to project most forcefully from this chart are the percentage figures for "Concern For People." The percentage who went into teaching because of a "Concern For People" jumped from 21% in 1971-73 to 48% in 1981-83.

- Are the economics of the teaching profession demanding that prospective teachers be motivated by a spirit of human service?

PROFILE OF THE TYPICAL ISU STUDENT TEACHER

	1972-73	1982-83
GPA	2.68	3.00
AGE	21.5	22.7
MAJOR	Ind Arts, MPE, WPE, Spec Ed, Soc Science	Ind Arts, MPE, WPE, Spec Ed
MARITAL STATUS	Single	Single
COMMUTING STATUS	Does Not	Does Not
MAJOR FACTOR IDENTIFIED AS DETERMINING THAT A TEACHER IS EITHER GOOR OR INCOMPETENT	Personal Characteristics	Personal Characteristics
NUMBER OF HOURS CREDIT TRANSFERRED TO ISU	Less Than 17	Less Than 17
WORKING STATUS	Does Not	Does Not
REASONS FOR CHOOSING TEACHING AS A PROFESSION	Wasn't Sure Why	Concern For People